

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PC-9480	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2005/006526	International filing date (day/month/year) 28/03/2005	(Earliest) Priority Date (day/month/year) 30/03/2004
Applicant SHOWA DENKO PLASTIC PRODUCTS CO., LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 4

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

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Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A method is provided for producing a bag with a mouth member (1) by liquidtightly melt-bonding a mouth member (1) comprising a thermoplastic resin and a bag unit comprising a relatively soft flexible film (2), in which uniform surface temperature of the mouth member (1) is realized, generation of an A-shaped gap (22) is prevented, and a bag with a mouth member (1) excellent in the liquidtightness of the meltbonded part between the mouth member (1) and the bag unit is produced; and also a production apparatus therefor is provided. The method comprises a preheating step of heating a tubular mouth member (1) while rotating it around the cylinder axis thereof, and a melt-bonding step of inserting the heated mouth member (1) into the opening part of a bag unit and pressing, and thereby melt-bonding the mouth member (1) to the opening part of the bag unit.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B29C65/02 B29B13/02 B31B19/84 A61J1/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B29C B29B A61J B31B B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	① WO 2004/039562 A (SHOWA DENKO PLASTIC PRODUCTS CO., LTD; MIZUO, TAKAYUKI; NAKAGAWA, TERU) 13 May 2004 (2004-05-13) page 12, line 18 - line 21	1-7, 9
P, X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 12, 5 December 2003 (2003-12-05) ② - & JP 2004 148578 A (SHOWA DENKO PLASTIC PRODUCTS CO LTD), 27 May 2004 (2004-05-27) abstract paragraph '0020!	1-7, 9
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

15 June 2005

Date of mailing of the international search report

04/07/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 04, 31 May 1995 (1995-05-31) ③ -& JP 07 016956 A (OTSUKA PHARMACEUT FACTORY INC), 20 January 1995 (1995-01-20) cited in the application abstract; figure 2	5 1,6,7
A	-----	
X	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 04, 31 May 1995 (1995-05-31) ④ -& JP 07 001587 A (OTSUKA PHARMACEUT FACTORY INC), 6 January 1995 (1995-01-06) abstract; figure 5	5 1,6,7
A	-----	
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 193 (C-0832), 17 May 1991 (1991-05-17) ⑤ -& JP 03 049762 A (GREEN CROSS CORP:THE), 4 March 1991 (1991-03-04) abstract	1,6,7
A	-----	
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 05, 30 June 1995 (1995-06-30) ⑥ -& JP 07 047104 A (KAWASUMI LAB INC), 21 February 1995 (1995-02-21) abstract	1,6,7

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Information on patent family members

International Application No

PCT/JP2005/006526

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 2004039562	A	13-05-2004	JP	2004148578 A	27-05-2004
			AU	2003278599 A1	25-05-2004
			WO	2004039562 A1	13-05-2004
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